



1
00:00:07,120 --> 00:00:10,790
this week at nasa

2
00:00:15,110 --> 00:00:13,030
administrator charles bolden joined

3
00:00:18,470 --> 00:00:15,120
other agency officials and members of

4
00:00:20,550 --> 00:00:18,480
congress for a nasa day on capitol hill

5
00:00:22,710 --> 00:00:20,560
to showcase the work being done on the

6
00:00:25,109 --> 00:00:22,720
international space station

7
00:00:27,990 --> 00:00:25,119
the roles of nasa centers supporting the

8
00:00:30,150 --> 00:00:28,000
iss were discussed by their directors

9
00:00:31,910 --> 00:00:30,160
and more than 20 exhibits illustrated

10
00:00:34,310 --> 00:00:31,920
the benefits of the groundbreaking

11
00:00:35,750 --> 00:00:34,320
research conducted on the orbiting

12
00:00:38,950 --> 00:00:35,760
laboratory

13
00:00:41,430 --> 00:00:38,960

as well as benefiting research the iss

14

00:00:43,830 --> 00:00:41,440

program promotes education and career

15

00:00:48,470 --> 00:00:43,840

opportunities for students in science

16

00:00:51,510 --> 00:00:50,389

if you go back to your experience

17

00:00:54,229 --> 00:00:51,520

onboard

18

00:00:56,310 --> 00:00:54,239

shuttle and roaming around station how

19

00:00:57,990 --> 00:00:56,320

do you find that life on aquarius

20

00:01:01,029 --> 00:00:58,000

compares or does it you know that

21

00:01:03,110 --> 00:01:01,039

beyonce mission is surely a sprint

22

00:01:05,270 --> 00:01:03,120

the moment you launch to the moment you

23

00:01:07,750 --> 00:01:05,280

land you are go go go

24

00:01:09,750 --> 00:01:07,760

and uh over these last few days we have

25

00:01:12,070 --> 00:01:09,760

been go go from

26

00:01:15,030 --> 00:01:12,080

six o'clock in the morning till late at

27

00:01:17,190 --> 00:01:15,040

night by a special television hookup

28

00:01:19,830 --> 00:01:17,200

administrator bolden paid a visit to the

29

00:01:22,070 --> 00:01:19,840

undersea aquarius reef base off key

30

00:01:24,870 --> 00:01:22,080

largo florida to speak with the four

31

00:01:27,590 --> 00:01:24,880

members of the nemo 16 crew

32

00:01:30,230 --> 00:01:27,600

this year nasa's extreme environment

33

00:01:32,550 --> 00:01:30,240

mission operations is testing concepts

34

00:01:34,870 --> 00:01:32,560

for a visit to an asteroid in an

35

00:01:37,030 --> 00:01:34,880

underwater environment that's the next

36

00:01:39,510 --> 00:01:37,040

best thing to being there based on what

37

00:01:40,710 --> 00:01:39,520

you imagined a mission to an asteroid

38

00:01:42,710 --> 00:01:40,720

would be like

39

00:01:45,429 --> 00:01:42,720

since we haven't done that yet do you

40

00:01:47,109 --> 00:01:45,439

see this training as realistic

41

00:01:50,069 --> 00:01:47,119

it's been an incredibly realistic

42

00:01:53,109 --> 00:01:50,079

mission yes absolutely

43

00:01:55,350 --> 00:01:53,119

i was lucky enough to do a caves mission

44

00:01:57,109 --> 00:01:55,360

last september with a european space

45

00:01:59,109 --> 00:01:57,119

agency and that was uh what i thought at

46

00:02:00,149 --> 00:01:59,119

the time was a good analog for the space

47

00:02:02,469 --> 00:02:00,159

flight but

48

00:02:05,990 --> 00:02:02,479

it's been a fantastic simulation

49

00:02:08,550 --> 00:02:06,000

scenario and a tremendous mission the

50

00:02:11,510 --> 00:02:08,560

16th nemo crew is commander dottie

51
00:02:14,070 --> 00:02:11,520
metcalf lindenberger of nasa european

52
00:02:16,470 --> 00:02:14,080
space agency astronaut timothy p

53
00:02:20,070 --> 00:02:16,480
japan aerospace exploration agency

54
00:02:22,390 --> 00:02:20,080
astronaut camilla yui and steve squires

55
00:02:29,350 --> 00:02:22,400
cornell professor of astronomy and

56
00:02:34,550 --> 00:02:31,750
bolden also returned to his hometown of

57
00:02:37,670 --> 00:02:34,560
columbia south carolina to help kick off

58
00:02:39,509 --> 00:02:37,680
2012 summer of innovation the nasa

59
00:02:41,030 --> 00:02:39,519
program that provides stem-related

60
00:02:43,030 --> 00:02:41,040
learning opportunities to

61
00:02:45,430 --> 00:02:43,040
underrepresented middle school students

62
00:02:47,110 --> 00:02:45,440
during the summer school break

63
00:02:50,949 --> 00:02:47,120

first stop was the administrator's

64

00:02:53,990 --> 00:02:50,959

middle school alma mater w.a perry

65

00:02:56,309 --> 00:02:54,000

at perry and at the city's challenger

66

00:02:59,110 --> 00:02:56,319

center bolden was joined by cheryl

67

00:03:01,430 --> 00:02:59,120

mcnair the wife of fallen space shuttle

68

00:03:05,110 --> 00:03:01,440

challenger astronaut and fellow south

69

00:03:08,309 --> 00:03:05,120

carolinian ron mcnair i wish you all a

70

00:03:11,350 --> 00:03:08,319

lifetime of achievement

71

00:03:13,830 --> 00:03:11,360

i look forward to hearing and seeing

72

00:03:16,869 --> 00:03:13,840

many wonderful things that you will

73

00:03:19,030 --> 00:03:16,879

create and do in the future

74

00:03:19,990 --> 00:03:19,040

reach for the stars

75

00:03:23,830 --> 00:03:20,000

why

76

00:03:25,430 --> 00:03:23,840

because i believe you can some 450

77

00:03:27,830 --> 00:03:25,440

students and educators availed

78

00:03:30,309 --> 00:03:27,840

themselves of numerous hands-on nasa

79

00:03:35,589 --> 00:03:30,319

activities that stem from the fields of

80

00:03:39,350 --> 00:03:37,670

the landmark vehicle assembly building

81

00:03:41,830 --> 00:03:39,360

at nasa's kennedy space center in

82

00:03:44,070 --> 00:03:41,840

florida is getting a renovation so it

83

00:03:45,589 --> 00:03:44,080

can remain a fixture of america's space

84

00:03:48,070 --> 00:03:45,599

program

85

00:03:50,229 --> 00:03:48,080

after almost five decades stacking and

86

00:03:53,030 --> 00:03:50,239

processing saturn fives and the space

87

00:03:55,110 --> 00:03:53,040

shuttle fleet the vab needs improvement

88

00:03:57,350 --> 00:03:55,120

on a grand scale to service new

89

00:03:59,110 --> 00:03:57,360

launchers expected to debut in the next

90

00:04:01,350 --> 00:03:59,120

few years

91

00:04:03,670 --> 00:04:01,360

the new designs include the space launch

92

00:04:06,229 --> 00:04:03,680

system a massive rocket intended to

93

00:04:08,390 --> 00:04:06,239

return astronauts to deep space

94

00:04:11,190 --> 00:04:08,400

the building also will be set up to host

95

00:04:13,509 --> 00:04:11,200

commercial rockets that are much smaller

96

00:04:15,110 --> 00:04:13,519

with that in mind engineers from the

97

00:04:17,270 --> 00:04:15,120

ground systems development and

98

00:04:19,270 --> 00:04:17,280

operations program have designed

99

00:04:21,909 --> 00:04:19,280

flexible systems that can meet the needs

100

00:04:23,830 --> 00:04:21,919

of several different kinds of boosters

101

00:04:26,230 --> 00:04:23,840

they also are making provisions for

102

00:04:28,550 --> 00:04:26,240

handling spacecraft including nasa's

103

00:04:30,550 --> 00:04:28,560

orion now in development

104

00:04:32,870 --> 00:04:30,560

but much of the work will focus on

105

00:04:35,270 --> 00:04:32,880

replacing wiring cables and fire

106

00:04:38,310 --> 00:04:35,280

protection system piping to meet modern

107

00:04:41,430 --> 00:04:38,320

standards and increase reliability

108

00:04:44,070 --> 00:04:41,440

already 70 000 feet of cabling have been

109

00:04:46,550 --> 00:04:44,080

pulled out of the building's cable trays

110

00:04:47,749 --> 00:04:46,560

in all 50 miles of cables will be

111

00:04:50,070 --> 00:04:47,759

removed

112

00:04:53,030 --> 00:04:50,080

most are bundles of copper wiring that

113

00:04:54,790 --> 00:04:53,040

were common in 1965 when the vab was

114

00:04:57,189 --> 00:04:54,800

constructed

115

00:04:59,590 --> 00:04:57,199

now it only requires a couple of fiber

116

00:05:02,790 --> 00:04:59,600

optic lines about as wide as a finger to

117

00:05:05,270 --> 00:05:02,800

meet the needs of rocket processors

118

00:05:07,670 --> 00:05:05,280

seven huge platforms bolted in high bay

119

00:05:09,749 --> 00:05:07,680

three to service the saturn v will be

120

00:05:12,070 --> 00:05:09,759

removed to make room for modern

121

00:05:13,430 --> 00:05:12,080

structures each weighing about 90 000

122

00:05:15,430 --> 00:05:13,440

pounds

123

00:05:17,590 --> 00:05:15,440

the new platforms will be outfitted with

124

00:05:19,110 --> 00:05:17,600

everything required to process a rocket

125

00:05:21,990 --> 00:05:19,120

and spacecraft

126

00:05:24,310 --> 00:05:22,000

the focus is to upgrade the vab for a

127

00:05:26,469 --> 00:05:24,320

new generation of launchers and missions

128

00:05:29,110 --> 00:05:26,479

to allow nasa and its partners to

129

00:05:31,749 --> 00:05:29,120

continue to meet national goals of space

130

00:05:33,510 --> 00:05:31,759

exploration

131

00:05:34,790 --> 00:05:33,520

and the nice thing about this is it

132

00:05:36,469 --> 00:05:34,800

really doesn't leak

133

00:05:39,029 --> 00:05:36,479

members of the virginia governor's

134

00:05:40,870 --> 00:05:39,039

aerospace advisory council toward

135

00:05:42,950 --> 00:05:40,880

facilities at the langley research

136

00:05:45,270 --> 00:05:42,960

center after holding a meeting at the

137

00:05:47,909 --> 00:05:45,280

nasa facility for the first time

138

00:05:50,230 --> 00:05:47,919

the aerospace advisory council advises

139

00:05:52,550 --> 00:05:50,240

the governor on policy and funding to

140

00:05:55,189 --> 00:05:52,560

promote aerospace and the space

141

00:05:57,590 --> 00:05:55,199

exploration industry in virginia

142

00:06:00,469 --> 00:05:57,600

langley center director lisa rowe is an

143

00:06:02,710 --> 00:06:00,479

active non-voting member of the 19 seed

144

00:06:05,749 --> 00:06:02,720

council

145

00:06:07,990 --> 00:06:05,759

it really is efforts like this

146

00:06:10,390 --> 00:06:08,000

at the ohio aerospace institute in

147

00:06:12,550 --> 00:06:10,400

cleveland the glenn research center

148

00:06:15,270 --> 00:06:12,560

hosted an industry day for the city's

149

00:06:17,110 --> 00:06:15,280

historically underutilized business zone

150

00:06:19,189 --> 00:06:17,120

or hubzone

151
00:06:21,270 --> 00:06:19,199
small companies learned the how to's of

152
00:06:23,510 --> 00:06:21,280
doing business with nasa their

153
00:06:26,230 --> 00:06:23,520
representatives also got to pitch their

154
00:06:29,029 --> 00:06:26,240
capabilities to glenn's contractors and

155
00:06:30,870 --> 00:06:29,039
small business specialists events like

156
00:06:32,950 --> 00:06:30,880
this 50 percent of the companies that

157
00:06:35,270 --> 00:06:32,960
are here were mandated to be small

158
00:06:37,189 --> 00:06:35,280
business hub zones and then the rest

159
00:06:38,390 --> 00:06:37,199
could be other types of small businesses

160
00:06:40,870 --> 00:06:38,400
because we're really trying to make an

161
00:06:42,309 --> 00:06:40,880
effort to find these companies find out

162
00:06:43,990 --> 00:06:42,319
what they do and see if they can fit

163
00:06:46,070 --> 00:06:44,000

into the nasa mission

164

00:06:49,270 --> 00:06:46,080

pub zone was established to stimulate

165

00:06:52,150 --> 00:06:49,280

economic growth increase employment and

166

00:06:54,390 --> 00:06:52,160

encourage investment within the area

167

00:06:56,390 --> 00:06:54,400

government agencies like nasa have been

168

00:06:59,189 --> 00:06:56,400

encouraged to increase the amount and

169

00:07:07,909 --> 00:06:59,199

value of contracts awarded to qualified

170

00:07:13,110 --> 00:07:10,790

nasa now a weekly five to seven minute

171

00:07:16,150 --> 00:07:13,120

online video produced at glen for the

172

00:07:18,550 --> 00:07:16,160

nasa explorer school project was awarded

173

00:07:20,550 --> 00:07:18,560

an emmy by the lower great lakes chapter

174

00:07:23,589 --> 00:07:20,560

of the national academy of television

175

00:07:25,830 --> 00:07:23,599

arts and sciences

176

00:07:28,950 --> 00:07:25,840

nasa now is a classroom resource

177

00:07:32,150 --> 00:07:28,960

profiling scientists engineers and

178

00:07:34,870 --> 00:07:32,160

technicians as real people and how they

179

00:07:37,589 --> 00:07:34,880

use science technology engineering and

180

00:07:39,670 --> 00:07:37,599

math in their work at the agency

181

00:07:41,589 --> 00:07:39,680

nasa now was cited for the production

182

00:07:48,550 --> 00:07:41,599

excellence of episodes highlighting

183

00:07:52,469 --> 00:07:50,070

johnson space center's office of

184

00:07:54,710 --> 00:07:52,479

education is giving community college

185

00:07:56,230 --> 00:07:54,720

students across the country a glimpse

186

00:07:58,390 --> 00:07:56,240

into the life of an engineer or

187

00:08:01,029 --> 00:07:58,400

scientist through the national community

188

00:08:02,710 --> 00:08:01,039

college aerospace scholars program

189

00:08:04,629 --> 00:08:02,720

this week we're working on designing a

190

00:08:06,230 --> 00:08:04,639

rover mission to mars we've been put

191

00:08:08,790 --> 00:08:06,240

into teams of 12

192

00:08:11,189 --> 00:08:08,800

and it's designing a budget

193

00:08:13,909 --> 00:08:11,199

your plans the actual mission and then

194

00:08:15,510 --> 00:08:13,919

we actually get to build the rovers and

195

00:08:17,350 --> 00:08:15,520

send them through test courses the

196

00:08:19,350 --> 00:08:17,360

national program is modeled after a

197

00:08:21,589 --> 00:08:19,360

similar initiative for texas community

198

00:08:23,430 --> 00:08:21,599

college students currently in its tenth

199

00:08:25,670 --> 00:08:23,440

year it's a three-day program it's

200

00:08:27,589 --> 00:08:25,680

incredibly fast-paced so most of the

201
00:08:28,869 --> 00:08:27,599
time the biggest challenges they face

202
00:08:30,309 --> 00:08:28,879
are getting all the work done in a lot

203
00:08:32,230 --> 00:08:30,319
of amount of time which is a normal

204
00:08:33,670 --> 00:08:32,240
engineering problem it also is a good

205
00:08:35,350 --> 00:08:33,680
motivation for community college

206
00:08:36,550 --> 00:08:35,360
students to move back into going to a

207
00:08:38,630 --> 00:08:36,560
four-year degree

208
00:08:40,870 --> 00:08:38,640
participants also build communication

209
00:08:43,029 --> 00:08:40,880
and teamwork skills and learn about

210
00:08:45,430 --> 00:08:43,039
other educational opportunities offered

211
00:08:46,630 --> 00:08:45,440
by nasa when i was a little kid i just

212
00:08:48,870 --> 00:08:46,640
want to be an astronaut i think maybe

213
00:08:50,870 --> 00:08:48,880

that's a common thing for people and uh

214

00:08:53,030 --> 00:08:50,880

when the opportunity came up to to get

215

00:08:54,949 --> 00:08:53,040

involved with nasa and to do something i

216

00:08:57,190 --> 00:08:54,959

feel like i had to take it i had to try

217

00:08:59,590 --> 00:08:57,200

at least

218

00:09:01,990 --> 00:08:59,600

he'll also approve the budget reality

219

00:09:03,829 --> 00:09:02,000

certain budget reallocations and again

220

00:09:06,630 --> 00:09:03,839

changes in statement of work and key

221

00:09:08,630 --> 00:09:06,640

personnel stennis's infiniti science

222

00:09:12,389 --> 00:09:08,640

center hosted a meeting of nasa's

223

00:09:14,150 --> 00:09:12,399

informal education institutions grantees

224

00:09:16,630 --> 00:09:14,160

also hosted by the jet propulsion

225

00:09:19,670 --> 00:09:16,640

laboratory and the nasa shared services

226
00:09:21,829 --> 00:09:19,680
center the meeting allowed nasa to gauge

227
00:09:24,470 --> 00:09:21,839
grantee progress and foster

228
00:09:28,790 --> 00:09:24,480
collaboration within the agency for more

229
00:09:31,509 --> 00:09:28,800
efficient and better use of nasa funds

230
00:09:34,550 --> 00:09:31,519
a major exhibit at washington dc's

231
00:09:37,190 --> 00:09:34,560
national museum of african art is the

232
00:09:40,470 --> 00:09:37,200
first to explore the historical legacy

233
00:09:42,710 --> 00:09:40,480
of african cultural astronomy and its

234
00:09:46,470 --> 00:09:42,720
intersection with both traditional and

235
00:09:49,509 --> 00:09:46,480
contemporary african arts african cosmos

236
00:09:51,990 --> 00:09:49,519
stellar arts is an exhibition of some 80

237
00:09:54,070 --> 00:09:52,000
objects reflecting the continent's long

238
00:09:55,430 --> 00:09:54,080

and rich history of astronomical

239

00:09:58,070 --> 00:09:55,440

observations

240

00:10:00,310 --> 00:09:58,080

the exhibit also explores how celestial

241

00:10:02,949 --> 00:10:00,320

bodies and phenomena serve as

242

00:10:05,430 --> 00:10:02,959

inspiration and symbol in the creation

243

00:10:07,509 --> 00:10:05,440

of african arts dating from ancient

244

00:10:09,190 --> 00:10:07,519

times to the presence so what we're

245

00:10:12,150 --> 00:10:09,200

celebrating today

246

00:10:14,870 --> 00:10:12,160

as we as we are here to launch with you

247

00:10:16,790 --> 00:10:14,880

this magnificent exhibition is

248

00:10:19,990 --> 00:10:16,800

celebrating the connection between art

249

00:10:21,910 --> 00:10:20,000

and science african cosmos stellar arts

250

00:10:24,310 --> 00:10:21,920

will be on display at the national

251
00:10:27,190 --> 00:10:24,320
museum of african art through december

252
00:10:30,150 --> 00:10:28,230
6

253
00:10:31,350 --> 00:10:30,160
5. we have three main engines up and

254
00:10:33,350 --> 00:10:31,360
running

255
00:10:35,190 --> 00:10:33,360
two one

256
00:10:37,269 --> 00:10:35,200
and liftoff of the space shuttle

257
00:10:39,190 --> 00:10:37,279
atlantis on a mission that will herald a

258
00:10:42,470 --> 00:10:39,200
new day of international cooperation in

259
00:10:44,310 --> 00:10:42,480
space seventeen years ago on june 27

260
00:10:47,190 --> 00:10:44,320
1995

261
00:10:48,949 --> 00:10:47,200
shuttle atlantis became the 100th u.s

262
00:10:51,190 --> 00:10:48,959
human space flight launch from cape

263
00:10:54,150 --> 00:10:51,200

canaveral embarking on a mission that

264

00:10:56,230 --> 00:10:54,160

would link it with mir for the first u.s

265

00:10:57,710 --> 00:10:56,240

space shuttle russian space station

266

00:11:00,389 --> 00:10:57,720

docking

267

00:11:02,870 --> 00:11:00,399

sts-71 would also mark the first

268

00:11:03,829 --> 00:11:02,880

on-orbit crew change out by a space

269

00:11:06,550 --> 00:11:03,839

shuttle

270

00:11:08,710 --> 00:11:06,560

atlantis commander hoot gibson and crew

271

00:11:12,389 --> 00:11:08,720

brought with them the members of the new

272

00:11:13,829 --> 00:11:12,399

mir 19 mission anatoly soloviev and

273

00:11:16,389 --> 00:11:13,839

nikolai

274

00:11:19,509 --> 00:11:16,399

and would return home with the mere 18

275

00:11:21,509 --> 00:11:19,519

crew of norm thagar vladimir de jourev

276

00:11:23,910 --> 00:11:21,519

and gennady strecholov

277

00:11:26,470 --> 00:11:23,920

astronauts and cosmonauts conducted five

278

00:11:27,990 --> 00:11:26,480

days of joint biomedical and scientific

279

00:11:30,949 --> 00:11:28,000

investigations

280

00:11:33,269 --> 00:11:30,959

atlantis undocked on the 4th of july and

281

00:11:58,150 --> 00:11:33,279

landed back at the kennedy space center

282

00:12:02,790 --> 00:12:00,470

thank you so much for coming to jpl we

283

00:12:05,509 --> 00:12:02,800

love what we do here and our primary

284

00:12:21,990 --> 00:12:05,519

mission is robotic exploration of the

285

00:12:22,000 --> 00:12:53,590

after you guys

286

00:12:58,790 --> 00:12:56,550

and that's this week at nasa for more on

287

00:13:01,430 --> 00:12:58,800

these and other stories or to follow us